Unit 6 Lesson 3A CW/HW

1. Use the given information to find the exact value of each

a. $\sin 2\theta$ b. $\cos 2\theta$ c. $\tan 2\theta$

I. $\sin\theta = \frac{15}{17}$, θ lies in quad. II.

I. $\cos\theta = \frac{24}{25}$, θ lies in quad. IV.

2. Use double-angle knowledge to find the exact value.

I. $2\sin 15^\circ \cos 15^\circ$ II. $\cos^2 105^\circ - \sin^2 105^\circ$

3. $\cos 2\theta = \cos^2\theta - \sin^2\theta$

Verify that we can also write this

$\cos 2\theta = 2\cos^2\theta - 1$ and $\cos 2\theta = 1 - 2\sin^2\theta$